

What is claimed is:

1. A method of dry etching an insulating film composed of an organic SOG film by a mixed gas containing at least C_4F_8 and O_2 , comprising the following step of:
setting a flow rate of O_2 to 50% or less of a flow rate of $C_4F_8+O_2$.
2. The method according to claim 1, wherein said dry etching is done to form a contact hole.
3. The method according to claim 1, wherein said organic SOG film is formed by adding an alkyl group to oxide silicon.
4. A method of dry etching an insulating film composed of an organic SOG film by a mixed gas containing at least CF_4 , CHF_3 and N_2 , comprising the following step of:
setting a flow rate of N_2 to above 10% and below 80% of a flow rate of $CF_4+CHF_3+N_2$.
5. The method according to claim 4, wherein said dry etching is done to form a contact hole.
6. The method according to claim 4, wherein said organic SOG film is formed by adding an alkyl group to oxide silicon.
7. A dry etching method, comprising the following step of:
forming contact holes in an insulating film composed of an organic SOG film, and
wherein plasma treatment for removing a resist pattern used to form said each contact hole is done by using $O_2+N_2H_2$.
8. The dry etching method according to claim 7, wherein said organic SOG film is formed by adding an alkyl group to oxide silicon.
9. A dry etching method, comprising the following step of:
forming contact holes in an insulating film composed of an organic SOG film, and
wherein plasma treatment for removing a resist pattern used to form said each contact hole is done by using $O_2+N_2+H_2$.

10. The dry etching method according to claim 9, wherein said organic SOG film is formed by adding an alkyl group to oxide silicon.

11. A dry etching method, comprising the following step of:
forming contact hole in an insulating film composed of an organic SOG film; and
wherein plasma treatment for removing a resist pattern used to form said each contact hole is done by mixing an oxygen gas with a gas for nitriding the organic SOG film.